

REMARKS

Claims 1-27 are pending in the application. Claims 1, 8, 12, 13, 19, and 25 have been amended herein. Favorable reconsideration of the application, as amended, is respectfully requested.

I. ALLOWABLE SUBJECT MATTER

Applicants acknowledge with appreciation the indicated allowability of claim 12 subject to being rewritten in independent form. Claim 12 has been amended to be in independent form. Thus, claim 12 is in condition for allowance.

For at least the reasons set forth below, it is respectfully submitted that other pending claims are also in condition for allowance.

II. REJECTIONS OF CLAIM 8 UNDER 35 U.S.C. § 112

Claim 8 stands objected to because of informalities. Claim 8 has been amended to address the Examiner's concern. Withdrawal of the objection is respectfully requested.

III. REJECTIONS OF CLAIMS 1-11, AND 13-27 UNDER 35 U.S.C. § 103

Claims 1-11, and 13-27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over "DOCSIS" in view of U.S. Patent No. 5,939,887 ("Schmidt"). Applicants believe that all pending claims are allowable for at least the following reasons. Withdrawal of the rejections is respectfully requested.

One of the features recited in independent claims 1, 13, 19, and 25 is related to testing a cable network. Independent claims 1, 13, 19, and 25 have been amended herein to further clarify one of the aspects of the invention. Specifically, independent claim 1 recites "identifying a group of time increments, associated with live data transmission, during which cable modems on the network are not scheduled to transmit data," "instructing a first one of the one or more cable modems to send a first signal of a first frequency at a first power during a first one of the time increments while the first cable modem is on line and engaged in live data transmission," and "instructing the first cable modem to send a second signal of a second frequency during an available time increment while the first cable modem is on line and engaged in live data transmission." Other independent claims contain recitations similar to those of claim 1. All of the limitations recited in claims 1, 13, 19, and 25 are described throughout the present specification (for example, page 2, line 33 - page 3, line 34). Thus, no new matter has been introduced by the claim amendments.

In the Action, DOCSIS was cited as describing some features recited in original independent claims 1, 13, 19, and 25. Specifically, the Examiner points to a ranging request shown in, for example, page 71 of DOCSIS. However, DOCSIS is silent on the above-identified claimed features, i.e., identifying a group of time increments, associated with live data transmission, during which cable modems on the network are not scheduled to transmit data, or instructing a first one of the one or more cable modems to send a first signal of a first frequency at a first power during a first one of the time increments while the first cable modem is on line and engaged in live data transmission. DOCSIS describes a ranging request in general. Rather, according to DOCSIS, a cable modem must wait until the response contains a Ranging Successful notification, and cannot join "normal data traffic." See, page 94, lines 25-27 of DOCSIS.

It is respectfully submitted that such a general description regarding a ranging request does not directly suggest that the test transmission is performed while the cable modem is on line and engaged in live data transmission. Therefore, DOCSIS cannot be said to show the above-identified claimed features.

The Schmidt patent was cited as describing use of a spectrum analyzer. However, Schmidt is not directly pertinent to the above-identified claimed features. It certainly does not suggest the test transmission is performed while the cable modem is on line and engaged in live data transmission as claimed. Therefore, Schmidt fails to cure the deficiencies of DOCSIS.

In summary, Applicants find nothing in the prior art that suggests the claimed test transmission during live data transmission. Therefore it is respectfully submitted that the invention defined in independent claims 1, 13, 19, and 25, and their dependent claims, is patentable over the cited art. Withdrawal of the rejections is respectfully requested.

IV. CONCLUSION

Applicants believe that all pending claims are in condition for allowance, and respectfully request a Notice of Allowance at an early date. If the Examiner has any continuing concerns about patentability of the claimed invention, he is encouraged to telephone the undersigned at 510-843-6200, ext 245.

Respectfully submitted,
BEYER WEAVER & THOMAS, LLP



Haruo Yawata
Limited Recognition under 37 CFR § 10.9(b)

P.O. Box 778
Berkeley, CA 94704-0778
Tel: 510-843-6200, ext. 245

**BEFORE THE OFFICE OF ENROLLMENT AND DISCIPLINE
UNITED STATES PATENT AND TRADEMARK OFFICE**

LIMITED RECOGNITION UNDER 37 CFR § 10.9(b)

Mr. Haruo Yawata is hereby given limited recognition under 37 CFR § 10.9(b) as an employee of Beyer Weaver & Thomas, LLP to prepare and prosecute patent applications wherein the patent applicant is the client of Beyer Weaver & Thomas, LLP, and the attorney or agent of record in the applications is a registered practitioner who is a member of Beyer Weaver & Thomas, LLP. This limited recognition shall expire on the date appearing below, or when whichever of the following events first occurs prior to the date appearing below: (i) Mr. Haruo Yawata ceases to lawfully reside in the United States, (ii) Mr. Haruo Yawata's employment with Beyer Weaver & Thomas, LLP ceases or is terminated, or (iii) Mr. Haruo Yawata ceases to remain or reside in the United States on an H-1 visa.

This document constitutes proof of such recognition. The original of this document is on file in the Office of Enrollment and Discipline of the U.S. Patent and Trademark Office.

Expires: January 2, 2007



**Harry I. Moatz
Director of Enrollment and Discipline**